



**REQUEST FOR PROPOSAL**

**TO PROVIDE ENGINEERING SERVICES FOR**

**LEONG DRIVE WATER AND SEWER MAIN REPLACEMENTS,**

**PROJECTS 16-21 AND 16-22**

**NOVEMBER 2016**

**PROPOSAL DUE DATE:**  
**Tuesday, November 29, 2016, by 10:00 AM**

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## **I. PROJECT DETAILS**

To supplement the following information, see Attachment 1 – Project Location Map for schematic drawing of project area.

Attachment 2 – City Utility Maps from the City’s water, sewer, and storm drain maps are also included to provide an overview of the existing utilities in the project area.

### **A. Project Objectives**

#### **1. Water System**

- a) Replace approximately 1800 lineal feet of water main on Leong Drive. Size and material of new pipe is proposed to be 12” zinc-coated DIP. Existing water pipes vary from 8” CIP, 8” ACP, and 12” ACP.
- b) Design future tie-ins at intersections.
- c) Replace water service laterals and meters, fire hydrants, and associated water system appurtenances.
- d) Design connection of (future) existing 12” DIP water service for 750 Moffett Boulevard to new Leong Drive water main. (Water service is currently completing design and will be scheduled for construction next year.)
- e) Test soil for resistivity and design cathodic protection. At a minimum, basic design elements should include the following:
  - i. Class 53 zinc-coated DIP
  - ii. Grade 316 stainless steel bolts
  - iii. Epoxy-coated fittings and valves
  - iv. Bag main, fittings, and services

Make recommendations for other appropriate measures where necessary.

- f) Use Nitrile gaskets and fittings for additional protection in MEW/contaminated areas and/or make recommendations for other appropriate measures where necessary.

## **2. Sanitary Sewer System**

- a) Replace approximately 1800 lineal feet of sewer main on Leong Drive. Existing sewer pipes vary from 6" VCP and 8" VCP. Suggest new pipe size and material.
- b) Redesign sanitary sewer main between manhole F5-058 and F5-060 to reverse sewer to flow north towards Evandale Avenue.
- c) Design new sewer main between F5-060 and F5-036 to flow north and connect to East Trunk Main.
- d) Replace sewer services and cleanouts.
- e) Investigate condition of existing sanitary sewer manholes and recommend rehabilitation or replacement of existing manholes.
- f) Design new sewer connection for 750 Moffett Boulevard across Moffett Boulevard to new Leong Drive sewer main.

The redesign of the sewer main on Leong Drive is based on the Schaaf & Wheeler "Moffett-Middlefield Sewer Diversion Feasibility" draft study dated October 21, 2016.

It is anticipated that water and sewer main improvements on Leong Drive will be installed via open-trench method. Trenchless construction method (e.g. jack and bore, horizontal directional drilling, etc.) is anticipated for the sewer crossing Moffett Boulevard with insertion and receiving pits located outside of Caltrans right-of-way per Caltrans requirements.

The decisions regarding final sizing and construction methods will be made during Phase 1 and/or 2 of the design based on input from City staff and recommendations from the Consultant.

### **B. Project Limits**

- Leong Drive from Walker Drive to Fairchild Drive with water main tie-ins at Walker Drive, Winston Place, Evandale Avenue, and Fairchild Drive
- Crossing Moffett Boulevard to connect to Leong Drive

### **C. Known Project Conditions and Constraints**

- Project area is located in proximity to the Middlefield-Ellis-Whisman (MEW) superfund groundwater plume with Trichloroethylene (TCE) as the primary contaminant of potential concern in groundwater and soil vapors with other chlorinated volatile organic compounds (VOCs) present at lesser concentrations. This condition requires coordination with US Environmental Protection Agency (EPA).
- Moffett Boulevard is Caltrans right-of-way and will require an Encroachment Permit.
- Existing sanitary sewer manhole on Fairchild Drive is adjacent to Caltrans right-of-way, and a work in this area may require an Encroachment Permit.
- Stevens Creek is located along the western portion of the project, and a Santa Clara Valley Water District (SCVWD) Encroachment Permit may be needed.
- Alternative 2 alignment of the sewer main connection for 750 Moffett Boulevard would use an existing storm sewer easement through private property (hotel). A new sewer line at this location may require relocation of an existing manhole and/or realignment of the sewer line within the easement. The existing storm sewer easement is 20-feet wide with an adjacent 10-foot wide access easement; a temporary construction easement from private property(ies) may be needed. Significant levels of TCE on the private property have been detected by the EPA and will require coordination with the EPA.
- Existing 81" RCP storm drain from Evandale Drive to Leong Drive and through private property.
- Existing 18" RCP storm drain through private property and crossing Leong Drive.
- Existing 24" gas transmission main through private property and crossing Leong Drive.
- Existing 3' wide electrical duct on Leong Drive.
- Possible NASA infrastructure along western edge of Moffett Boulevard.

## II. SCOPE OF SERVICES

*The Scope of Work below is the **minimum** necessary to meet the City's objectives. The Consultant is expected to expand on this scope of work and to incorporate their own expertise into their proposal.*

The engineering services to be provided by the Consultant and/or its subconsultants for the project consist of assisting the City in the design of the utility replacement projects. All work shall comply with the City of Mountain View Standard Provisions; Standard Design Criteria; and all other applicable codes, regulations, and specifications governing the work.

### A. **PHASE 1 – Preliminary Investigation and Project Coordination**

The Consultant shall:

- Prepare a project schedule. Submit schedule within five (5) working days of award of contract. The City would like to begin the project by February 2017 and complete design by January 2018.

The schedule shall also be updated and provided to the City with each submittal outlined in Phases 2 and 3 and upon request by the City.

- Meet with City staff to review project requirements and existing information.
- Visit project site and investigate existing site conditions to identify opportunities, constraints, and to verify the presence of existing utilities and other conditions.
- Review and research data/reference material pertinent to the project, including but not limited to manhole surveys; closed-circuit television (CCTV) logs and videos; soil data from previous sampling; Health and Safety Plans (HASP) from previous investigations; tree inventory and arborist reports; previous design plans; as-built improvement plans; available right-of-way documents; City Standard Provisions, Standard Details, and Design Criteria; and codes, ordinances, and policies pertaining to the proposed project design.
- Perform and prepare a topographic survey of the work areas sufficient to design the project. The survey shall locate existing features, including but not limited to utilities, curbs, gutters, sidewalks, pavement, fences, drainage structures, trees, monuments, and other features required to design the project.

- Prepare and provide a geotechnical soil disposal report along the project construction site with analytical results for the landfill. Conduct utility potholing investigations to verify existing utility depths.
  - Work conducted within City right-of-way will require an Excavation Permit from the Public Works Department. Traffic control plans will be required as part of the Excavation Permit application and shall be prepared in accordance with the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD). Excavation Permits for this task will be issued at no fee to the Consultant and/or contractor. City insurance requirements must be met.
  - Work conducted within Caltrans right-of-way will require an Encroachment Permit from Caltrans.
  - Work conducted within SCVWD right-of-way will require an Encroachment Permit from SCVWD.
  - Preparation of a Health and Safety Plans (HASP) may be required by the EPA due to known presence of TCE and proximity to MEW Superfund area.
- Conduct arborist investigations regarding impacts to trees and prepare final report. The arborist report for the Moffett Gateway private development at 750 Moffett Boulevard can be found on the City's website in the project's Draft Environmental Impact Report, Appendix D, using the following link: <http://www.mountainview.gov/depts/comdev/planning/activeprojects/moffettgateway.asp>. A tree inventory prepared for the City for the Moffett Gateway property is also available.
- Prepare and process environmental documents in connection with the project to achieve CEQA compliance. For proposal purposes, assume a mitigated negative declaration will be required.
- Prepare and process EPA-required documents/reports in connection with the MEW Superfund area and known presence of TCE.
- Prepare and submit required documentation to obtain encroachment permit and design approval from Caltrans.
- Evaluate the need for Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP) in accordance with latest provisions in the National Pollution Discharge Elimination System (NPDES) Construction General

Permit, as required by the State Water Resources Control Board (SWRCB).  
Provide written documentation of findings and recommendations.

- Coordinate with PG&E, AT&T, Comcast, NASA, City Public Services Department, etc., as needed.
- Coordinate with private development project at 750 Moffett Boulevard, as needed.

## **B. PHASE 2 – Schematic Design**

The Consultant shall:

- Evaluate and recommend pipe alignment and construction method of water and sewer mains on Leong Drive. Recommend pipe size and material.
- Evaluate and recommend handling (i.e. removal and/or abandonment) of existing water and sewer mains to be replaced.
- Evaluate and recommend pipe alignment and construction method of sewer main connection for 750 Moffett Boulevard through Moffett Boulevard/Leong Drive intersection (Alternative 1). Recommend pipe size and material.

Evaluate and recommend pipe alignment and construction method of sewer main connection for 750 Moffett Boulevard through existing easement on private property (Alternative 2). Recommend pipe size and material.

Based on Consultant recommendations and proposed design, one alternative will be selected to proceed with 65 percent design.

- Evaluate impacts to hotel property during construction and recommend potential mitigation measures.
- Evaluate and recommend construction phasing to allow the new sewer main connection for 750 Moffett Boulevard to be constructed as soon as possible.
- Provide written documentation of evaluations and recommendations, and present findings to City.
- Prepare 35 percent engineering plans for Leong Drive and proposed Alternate 1 and Alternate 2 alignments for 750 Moffett Boulevard.
  - Design shall meet requirements specified in City Standard Design Criteria.

- Provide plan and profile of existing versus proposed utilities based on as-built plans and/or potholed elevations of existing utilities.
- Show clearances – horizontal and vertical – between all utilities existing and proposed. Regulatory requirements for utility designs (such as minimum separation distances and not centerline distance) must be met.
- Provide sewer design calculations.
- Provide schematic trench design (i.e. typical cross sections) showing existing utilities versus proposed improvements. Dimension clearances between utilities existing and proposed.
- Submit six (6) full-size sets/hard copies and a soft copy (i.e. PDF) of the 35 percent plans.
- Prepare responses and meet with City staff to review comments and responses on the schematic 35 percent plans. Revise plans and calculations, as necessary, to reflect City comments and directions.

### **C. PHASE 3 – Design Development/Construction Documents**

Upon approval of the schematic design by the City, the Consultant shall:

- Prepare and submit 65 percent design and construction documents, including drawings, technical specifications, engineer's estimate, calculations, and other necessary documents.
  - Design drawings shall include all elements of the project, including but not limited to standard City Construction Notes, project specific notes, applicable City Standard Details, project details, plan views and profiles, cross sections, tree removal and mitigation, traffic control and construction phasing, and construction haul routes.
  - Design shoring for trenchless construction.
  - Provide calculations for sewer design.
  - Traffic control plans shall be phased plans that address the different phases (i.e. sequence of work) needed to construct the proposed improvements. Traffic control plans shall be prepared in accordance with the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD). At



a minimum, plans must show and identify no parking areas; temporary lane closures, including duration of closure per day; and sidewalk/pedestrian access and detours when necessary, including duration.

- Technical specifications shall reference City standards for materials and construction methods, as specified in the Standard Provision, as much as reasonably possible before considering non-City standard material and methods of installation. Provide detailed technical specifications for those items that are not covered by the Standard Provisions.
- Technical specifications shall include measurement and payment clauses for all bid items referenced.
- Submit six (6) full-size sets/hard copies and soft copies (i.e. PDFs) of the 65 percent plans, technical specifications, and cost estimate.
- Meet with City staff to review comments on the 65 percent submittal. Revise plans, specifications, cost estimate, and calculations, as necessary, to reflect City comments and directions.
- Prepare and submit 95 percent design and construction documents based on the 65 percent submittal review comments. This submittal shall include responses to reviewer comments. The same review and revision process described above for the 65 percent submittal shall repeat for the 95 percent submittal.
- Prepare and submit "Draft" 100 percent design and construction documents based on the City's 95 percent submittal review comments. This submittal shall include responses to reviewer comments. Meet with City staff to review comments on the "Draft" 100 percent submittal. Revise plans, specifications, cost estimate, and calculations, as necessary, to reflect City comments and directions.
- The "Final" 100 percent set shall include one (1) wet-signed copy, six (6) sets/hard copies, one (1) digital file of each of the construction plans, specifications, and construction cost estimate. The digital files for the "Final" 100 percent construction plans, technical specifications, and construction cost estimate shall be in AutoCAD, Microsoft Word, and Microsoft Excel, respectively, as well as PDF format.

#### **D. PHASE 4 - Bidding**

The Consultant shall:

- Attend prebid conference conducted by the City.

- Assist the City, as required, in responding to bidders' inquiries and requests for clarifications.
- Prepare and issue addenda, as necessary.

#### **E. PHASE 5 – Construction**

The Consultant shall:

- Attend preconstruction conference conducted by the City.
- Provide construction staking for the project.
- Review and approve shop drawings and submittals in a timely manner.
- Respond to RFIs, as necessary, in a timely manner.
- Assist the City to resolve issues during construction, as necessary.
- Review post-construction CCTV logs and DVDs or videos to determine acceptability of the rehabilitated sewer.
- Assist the City in evaluating any necessary contract change orders and construction claims.

#### **F. PHASE 6 – Post-construction**

The Consultant shall:

- Prepare record drawings. After construction, the City will transmit to the Consultant the contractor's redlined record drawings.
- Submit one (1) signed, stamped set of record drawings on Mylar incorporating the changes during construction.
- Submit AutoCAD and PDF files of the record drawings to the City.

Although successful completion of all phases and tasks of the project is anticipated, the City reserves the right to delete portions of or terminate the work at any time it deems necessary. In the event of termination of the contract prior to its completion, the Consultant shall, at the option of the City, promptly deliver to the City all work

products completed to date, including papers, notes, files, and data previously collected by the Consultant.

All work products generated by the Consultant and paid for by the City shall be the property of the City. All property rights, including publication rights to preliminary and final reports prepared in conjunction with this project, shall be vested in the City of Mountain View. The Consultant shall not publish or release any of the results of the report without the express written permission from the City.

#### **G. Optional Services**

- Prepare plat maps and legal description for temporary construction easement through private property(ies).
- Prepare and submit required documentation to obtain encroachment permit and design approval from SCVWD.
- Optional/additional services may be required or desired and will be reviewed on a case-by-case basis by the City. Optional/additional services requested by the City will be provided in writing to the Consultant. Optional/additional services will be compensated on an hourly basis for an agreed upon not-to-exceed amount in accordance with rates set forth in the fee schedule submitted.

#### **H. Additional Services**

- The Consultant shall clearly state any exclusion in their basic proposal and scope of work.
- The Consultant may propose additional services beneficial to the project.
- Additional services may be required or desired and will be reviewed on a case-by-case basis by the City. Additional services requested by the City will be provided in writing to the Consultant. Additional services will be compensated on an hourly basis for an agreed upon not-to-exceed amount in accordance with rates set forth in the fee schedule submitted.

### **III. CITY RESPONSIBILITIES**

To aid the design and construction of the project, the City will typically:

- Designate a City project manager and/or project engineer and a construction inspector for the project.

- Provide such information regarding utilities, site features, and existing construction, as is available from City records.
- Provide project requirements, including design objectives, budget, constraints, and criteria. City's requirements are further defined during the schematic design phase.
- Provide timely reviews of Consultant's submittals in order to avoid delays.
- Prepare proposal forms, General Provisions, and Special Provisions for inclusion in the Project Specifications.
- Prepare and execute the contract with the construction contractor selected pursuant to the bid process.
- Provide construction inspection.
- Prepare and issue change orders.

#### **IV. AVAILABLE BACKGROUND MATERIAL**

The following is a list of background material that will be available to assist in the design of the water/sewer replacement project:

- City of Mountain View Standard Provisions, revised March 2005. (The latest edition is available online at [www.mountainview.gov](http://www.mountainview.gov).)
- City of Mountain View Standard Design Criteria.
- 65% drawings from past design of Leong Drive water main replacement.
- Manhole survey data.
- EPA-reviewed Health and Safety Plans (HASP) from previous geotechnical sampling and potholing investigation.
- Soil data from previous geotechnical sampling and potholing investigation
- Soil disposal report from previous geotechnical sampling.
- Tree Inventory for Moffett Gateway Property.

- Arborist report for the Moffett Gateway private development at 750 Moffett Boulevard can be found on the City website in the project's Draft Environmental Impact Report, Appendix D, using the following link:  
<http://www.mountainview.gov/depts/comdev/planning/activeprojects/moffettgateway.asp>.
- As-built drawings, including water, sewer, and storm drain, where available.
- City utility maps of water, sanitary sewer, and storm drain systems.
- CCTV logs and video tapes or DVDs for sanitary sewer lines in the project areas.
- Vertical datum and benchmark information.
- GIS aerial maps and other City base layers in GIS or CADD electronic format.
- Electronic CADD file of Cover Sheet and Design Sheet templates.

The City does not warrant the accuracy of the information contained in the material it provides.

## **V. PROPOSAL INSTRUCTIONS**

### **A. Proposal Format**

The proposal is to consist of three (3) parts. Part I and Part II shall be submitted as a single package and Part III packaged separately.

#### **1. Part I**

Part I shall describe the Consultant's proposed project team and approach to accomplishing the project goals. The proposal should address, at a minimum, the following:

- a) Outline the proposed approach to the Scope of Services, including organization and scheduling of tasks to be performed, capacity to keep the project within budget, and other relevant factors pertaining to formulation and execution of a successful project.
- b) Identify the name and title of the project manager/lead contact person and key staff who will be assigned to this project and show team structure in an organization chart. Provide qualifications and work history for key personnel. Give a description of their responsibilities and the percentage of

time expected to be spent on this project. Identify the support staff available for this project.

- c) Provide a list of recent projects with names of key staff for which the firm has provided services of a similar nature and contract amount. Provide all pertinent information, including project description, contact person, phone number, location, duration, current project status.
- d) As applicable, provide a list of subconsultants, and describe how each subconsultant will be utilized on this project. Identify principal staff assigned to this project from each subconsultant firm and their responsibilities on this project. Show subconsultants in project organization chart.
- e) Indicate the location of the office(s) where work will be carried out.
- f) Submit a project schedule showing the anticipated completion date for each of the tasks to be performed on this project and all other pertinent milestones necessary to carry out the project.

## **2. Part II**

Part II shall be a fee schedule. The elements of the fee proposal shall include the following:

- a) An hourly rate schedule, valid for the duration of this contract (to be stated in proposal fee schedule), for each firm personnel who will be working on the project.
- b) A time and material not-to-exceed fee for each of phase of the project, including appropriate meetings with City staff. Meeting durations do not include travel time.
- c) Fees for each subconsultant working on the project.
- d) An estimated fee for reimbursables by each phase, including reproduction of plans, reports, mileage reimbursement, etc., which are not considered as engineering services.
- e) A list of potential additional services other than the basic services. The City will review these additional services on a case-by-case basis. If accepted, written authorization will be issued, and the additional services will be compensated on an hourly basis.

- f) The fee proposal shall be broken down into logical phases and tasks described in this RFP.

### **3. Part III**

Part III shall demonstrate the Consultant's work product. Submit an example plan set (11x17 size plans are acceptable) and technical specifications of a recent project for which the firm has provided services of a similar nature under the project manager assigned to this project.

#### **B. Submission of Proposals**

The proposal shall be submitted electronically as a searchable soft copy (i.e. PDF) to [arlynn.bumanglag@mountainview.gov](mailto:arlynn.bumanglag@mountainview.gov).

**Deadline for submitting the proposal is 10:00 AM, Tuesday, November 29, 2016.**

The City will not be liable for any costs incurred by the proposer incidental to the preparation and presentation of qualifications, either orally or in the proposal. Costs for preparation of proposals will be the sole responsibility of the Consultant and will not be paid for by the City.

## **VI. CITY STANDARD PROFESSIONAL SERVICES AGREEMENT**

The City's contract is a standard agreement issued to all consultants under contract to the City. A sample of the standard form is included in Attachment 3 – Sample Professional Service Agreement. The submission of a proposal is an indication that the Consultant is satisfied with the contents of the agreement. The Consultant must meet the insurance and other requirements contained in the agreement.